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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,225	10/03/2003	Oren Sapir	935.43189X00	8599
20457 7590 12/10/2009 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873				
EXAMINER SIEFKE, SAMUEL P				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
12/10/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/677,225

**Applicant(s)**

SAPIR ET AL.

**Examiner**

SAM P. SIEFKE

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0169057 (herein after Ep '057) in view of Wilder et al. (USPN 3,826,067) and in further view of Jenkins et al. (USPN 6,642,513).

Ep '057 teaches a method for detecting contraband substances that comprises the following steps, placing a container (smaller containers) in a closed space (large cargo container) and sampling the air within the cargo container with a filter by sucking air past the filter (page 4), the filter is then removed and the filter is heated to vaporize the particles contained on the filter and then the vapors are analyzed in a mass analyzer (abstract, page 2, lines 14-19, page 3, lines 4-12). The method is designed to detect traces of solid particles (explosive, dynamite, PETN, TNT, narcotics, heroin, cocaine, cannabis, marijuana) (page 7, 8 and table 1). The filter is a wire mesh coil that can be heated to vaporize the solid particles (page 17). The air stream 71 in the line 48 enters the center of the coil 70 and travels radially there through as indicated by arrows 72 (much like an automobile air filter). This statement meets all the limitations of the newly amended claim 1 the filter it is open at one opening where air flow 71 enters then exits through the filter and not through the back side of the filter which is closed.

Ep '057 does not teach a filter that comprises a hollow tubular outer casing containing a filter-forming element which is supported on a central element and is closed at one end.

Wilder teaches a filter assembly that comprises a hollow tubular outer casing (31) containing a filter forming element (36) which is supported on a central element (33) and is closed at one end (left side of 34 that contacts the filter 36, fig. 6) so as to prevent air

from passing through and to oblige air to pass only through the filter forming element (fig. 6). Since the design of Wilder forces the air to only pass through the filter forming element because it is closed at one end this design enables 100% of the sample air to pass through the filter. This is a desirable property of a filter because it allows the filter to collect most if not all of the sample analyte of interest as the air passes through the filter. Therefore it would have been obvious to one having an ordinary skill in the art at the time of the invention to modify Ep '057 to employ a filter probe of Wilder because the design forces the sample air to only pass through the filter forming element because it is closed at one end this design enables 100% of the sample air to pass through the filter.

The modified EP '057 does not teach a woven fabric or a non-woven fabric.

Jenkins teaches materials for the detection of contraband that comprises filters that are made of woven fabric, non-woven fabrics and fabrics made of plastic materials. (col. 2, line 59 –col. 3, line 17). Jenkins states that the fabrics are made of high temperature fibers which allows for rapid heating to temperatures exceeding 200 degrees Celsius. Therefore, it would have been obvious to one having an ordinary skill in the art at the time of the invention to modify the modified Ep '057 to employ the fabrics of Jenkins because it is well known in the art that specific fabrics are capable of being heated to high temperatures thereby vaporizing any solid substances trapped therein which allows for vapor detection of the sample.

Regarding claim 4, it is well known in the art that animals, i.e. dogs, are specifically trained to smell and detect traces of contraband. Therefore it would have

been obvious to one having an ordinary skill in the art at the time of the invention to modify Ep '057 to employ an animal sniffing the filter to determine if any contraband is on the filter because it is well known that animals can detect contraband.

### ***Response to Arguments***

Applicant's arguments filed 8/10/09 have been fully considered but they are not persuasive.

Applicant argues, "The Wilder et al teaches that the filter is used in an exhaust system for an internal combustion engine. There is absolutely no reason provided by Wilder et al to use the filter in a method of detecting contraband substances as in EP '057. Moreover, noting that EP '057 teaches that the air stream should pass radially through the coil so that the air stream goes from the interior to the exterior of the coil, EP' 057 would have taught away from using a filter of the type described in Wilder et al." Webster's Ninth New Collegiate Dictionary defines filter: (1) a porous article or mass through which a gas or liquid is passed to separate out matter in suspension; (2) an apparatus containing a filter medium. The Examiner states that a filter performs the same duty whether the filter is employed in an exhaust system or a biological system. The sole purpose is separate out a matter in a suspension as defined. Therefore one of ordinary skill in the art would have looked at different technology to see how and if any different style filters that are more efficient at filtering out particles in a suspension could be employed in separating contraband from an air suspension.

Regarding the particular air flow through the filter, the Examiner maintains that a particle filter flow direction is not necessary as the filter employed captures the same amount of particles regardless of the flow direction. Therefore it would have been obvious to one having an ordinary skill in the art to reverse the flow direction because it would not have any effect on the number of particles collected in a flow of gas with a predetermined content of particles to be collected.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAM P. SIEFKE whose telephone number is (571)272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel P Siefke/  
Primary Examiner, Art Unit 1797